Brandon S. Erlacher Elkhart Truth Publishing Company 421 South Second Street Elkhart, IN 46516

Re: Registered Operation Status, 039-11783-00269

Dear Mr. Erlacher:

The application from Elkhart Truth Publishing Company, received on January 19, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following printing line which prints daily newspapers, to be located at 421 South Second Street, Elkhart, Indiana 46516 is classified as registered:

- (a) One (1) printing line identified as Harris N-1650, consisting of five (5) Web offset printing presses identified as Unit 1 through Unit 5, with a maximum line speed of 1600 feet per minute and a maximum printing width of fifty-four (54) inches;
- (b) One (1) natural gas-fired boiler identified as B1, with a maximum heat input rate of 4.6 million (MM) British thermal units (Btu) per hour;
- (c) Two (2) natural gas-fired boilers identified as B2 and B3, each with a maximum heat input rate of 0.9 MMBtu per hour;
- (d) Image processing and transfer facilities; and
- (e) Equipment cleaning solvents and washes.

The following conditions shall be applicable:

Pursuant to 326 IAC 2-6 (Emission Reporting), the owner/operator of this source must annually submit an emission statement for this source because the source is located in Elkhart county and has the potential to emit more than ten (10) tons per year of VOC. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of

15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

Pursuant to 326 IAC 6-2-3(d) (Particulate Emission Limitations for Sources of Indirect Heating), the one (1) 4.6 MMBtu/hr natural gas fired boiler (identified as B1), constructed on August 4, 1964 is subject to a default particulate matter emission limit of 0.8 pounds per million (MM) Btu of heat input. The source will comply with this limit through the use of natural gas fuel.

Pursuant to 326 IAC 6-2-3(e) (Particulate Emission Limitations for Sources of Indirect Heating), the two (2) 0.9 MMBtu/hr natural gas fired boilers (identified as B2 and B3), constructed on March 1, 1973 are subject to a default particulate matter emission limit of 0.6 pounds per million (MM) Btu of heat input. The source will comply with this limit through the use of natural gas fuel.

This registration supersedes any previous air approvals issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Management that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section Office of Air Management 100 North Senate Avenue P.O. Box 6015 Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

NH/EVP

cc: File - Elkhart County
Elkhart County Health Department
Air Compliance - Rick Reynolds
Northern Regional Office
Permit Tracking - Janet Mobley
Air Programs Section- Michelle Boner

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Elkhart Truth Publishing Company	
Address:	421 South Second Street, Elkhart, IN 46516	
City:	Elkhart	
Authorized individual: Brandon S. Erlacher		
Phone #:	(219) 294-1661	
Registration #:	039-11783-00269	

I hereby certify that Elkhart Truth Publishing Company is still in operation and is in compliance with the requirements of Registration 039-11783-00269.

Name (typed):	
Title:	
Signature:	
Date:	

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Elkhart Truth Publishing Company

Source Location: 421 South Second Street, Elkhart, IN 46516

County: Elkhart SIC Code: 2711

Operation Permit No.: R039-11783-00269 **Permit Reviewer:** Nishat Hydari / EVP

The Office of Air Management (OAM) has reviewed a renewal application from Elkhart Truth Publishing Company relating to the operation of a printing line which prints daily newspapers.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) printing line identified as Harris N-1650, consisting of five (5) Web offset printing presses identified as Unit 1 through Unit 5, with a maximum line speed of 1600 feet per minute and a maximum printing width of fifty-four (54) inches;
- (b) One (1) natural gas-fired boiler identified as B1, with a maximum heat input rate of 4.6 million (MM) British thermal units (Btu) per hour;
- (c) Two (2) natural gas-fired boilers identified as B2 and B3, each with a maximum heat input rate of 0.9 MMBtu per hour;
- (d) Image processing and transfer facilities; and
- (e) Equipment cleaning solvents and washes.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) CP 039-4017-00269, issued on January 9, 1995.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on January 19, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 4.)

Potential To Emit of Entire Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)		
PM	0.05		
PM-10	0.21		
SO ₂	0.02		
VOC	10.85		
СО	2.35		
NO,	2.80		

HAP's	Potential To Emit (tons/year)		
Xylene	0.25		
Cumene	0.20		
Napthalene	0.05		
TOTAL	0.50		

(a) Potential emissions (as defined in the Indiana Rule) of VOC are less than 25 tons per year, but greater than 5 tons per year. Therefore, pursuant to 326 IAC 2-5-5, a registration is required.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status		
PM-10	attainment		
SO ₂	attainment		
NO_2	attainment		
Ozone	maintenance		
СО	attainment		
Lead	attainment		

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment for ozone.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Emissions (ton/yr)		
PM	0.05		
PM10	0.21		
SO ₂	0.02		
VOC	10.85		
CO	2.35		
NO _x	2.80		

(a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this Registration R039-11783-00269, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAM inspector assigned to the source.

Federal Rule Applicability

(a) The three (3) natural gas fired boilers identified as B1, B2 and B3, are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Dc), because the three (3) boilers were constructed prior to June 9, 1989.

Page 4 of 5 R039-11783-00269

Elkhart Truth Publishing Company Elkhart, Indiana Permit Reviewer: NH/EVP

(b) The one (1) printing line identified as Harris N-1650, consisting of five (5) Web offset printing presses identified as Unit 1 through Unit 5, is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart QQ), because the five (5) printing presses are not publication rotogravure printing presses.

(c) The one (1) printing line identified as Harris N-1650, consisting of five (5) Web offset printing presses identified as Unit 1 through Unit 5, is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart KK because the five (5) printing presses are not publication rotogravure, packaging rotogravure or wide-web flexographic printing presses.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Elkhart county and has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)

- (a) The one (1) 4.6 MMBtu/hr natural gas fired boiler (identified as B1) was constructed on August 4, 1964 and pursuant to 326 IAC 6-2-3(d), is subject to a default particulate matter emission limit of 0.8 pounds per million (MM) Btu of heat input. The source will comply with this limit through the use of natural gas fuel.
- (b) The two (2) 0.9 MMBtu/hr natural gas fired boilers (identified as B2 and B3) were constructed on March 1, 1973 and pursuant to 326 IAC 6-2-3(e), are subject to a default particulate matter emission limit of 0.6 pounds per million (MM) Btu of heat input. The source will comply with this limit through the use of natural gas fuel.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The printing presses are not subject to the requirements of 326 IAC 8-1-6 because the presses were constructed and operated prior to January 1, 1980 and have a total potential to emit VOC of less than 25 tons per year.

326 IAC 8-5-5 (Graphic Arts Operations)

The printing line (identified as Harris N-1650) is not subject to the requirements of 326 IAC 8-5-5, because the five (5) printing presses do not involve packaging rotogravure, publication rotogravure or flexographic printing.

Elkhart Truth Publishing Company Page 5 of 5
Elkhart, Indiana R039-11783-00269
Permit Reviewer: NH/EVP

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations (Appendix A, page 3.)

Conclusion

The operation of this printing line shall be subject to the conditions of the attached proposed **R039-11783-00269**.

Appendix A: Emission Calculations

Company Name: Elkhart Truth Publishing Company

Address City IN Zip: 421 South Second Street, Elkhart, IN 46516

CP: 039-11783 **Plt ID**: 039-00269

Reviewer: Nishat Hydari / EVP

	Uncontrolled Potential Emis		
	Emissions Generatin	ng Activity	
Pollutant	Natural Gas	Printing	TOTAL
	Combustion	Press	
PM	0.05	0.00	0.0
PM10	0.21	0.00	0.2
SO2	0.02	0.00	0.0
NOx	2.80	0.00	2.8
VOC	0.15	10.70	10.8
СО	2.35	0.00	2.3
total HAPs	0.00	0.50	0.5
worst case single HAP	0.00	0.25	0.2
al emissions based on rated ca		sions (tons/year)	
al emissions based on rated ca	Controlled Potential Emiss		
	Controlled Potential Emiss	g Activity	TOTAL
al emissions based on rated ca	Controlled Potential Emiss		TOTAL
Pollutant	Controlled Potential Emiss Emissions Generatin Natural Gas Combustion	ng Activity Printing Press	
Pollutant PM	Controlled Potential Emissions Generation Natural Gas Combustion 0.05	pg Activity Printing Press 0.00	0.0
Pollutant	Controlled Potential Emiss Emissions Generatin Natural Gas Combustion	ng Activity Printing Press	0.0
Pollutant PM PM10	Controlled Potential Emissions Generation Natural Gas Combustion 0.05 0.21	Printing Press 0.00 0.00	0.0 0.2 0.0
Pollutant PM PM10 SO2	Emissions Generation Natural Gas Combustion 0.05 0.21 0.02	Printing Press 0.00 0.00 0.00	0.0 0.2 0.0 2.8
Pollutant PM PM10 SO2 NOx	Emissions Generation Natural Gas Combustion 0.05 0.21 0.02 2.80	Printing Press 0.00 0.00 0.00 0.00 0.00	TOTAL 0.0 0.2 0.0 2.8 10.8 2.3
Pollutant PM PM10 SO2 NOX VOC	Emissions Generation Natural Gas Combustion 0.05 0.21 0.02 2.80 0.15	9 Activity Printing Press 0.00 0.00 0.00 0.00 0.00 10.70	0.0 0.2 0.0 2.8 10.8

Appendix A: Emissions Calculations VOC From Printing Press Operations

Company Name: Elkhart Truth Publishing Company

Address City IN Zip: 421 South Second Street, Elkhart, IN 46516

CP: 039-11783 **PIt ID**: 039-00269

Reviewer: Nishat Hydari / EVP

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR
Harris N-1650	1600	54	544942

INK VOCS					
Ink Name Press Id	Maximum Coverage '(lbs/MMin^2)	Weight % Volatiles	Flash Off %	Throughput (MMin^2/Year)	Emissions* (TONS/YEAR)
1 1033 10	(153/141141111 2)			(IVIIVIIII Z/TCai)	(TONO/TEAR)
Black Ink, NHNP Low Rub (Oil)	0.854	12.8%	5.00%	544942	1.49
Color Ink (Soy) (Worse Case, Yellow)	0.18	7.5%	5.00%	544942	0.18
Blanket Wash Y-911	0.031	96.0%	100.00%	544942	0.1
Blanket Wash Y-995	0.003	30.0%	100.00%	544942	8.1 ² 0.25
Bleach Sanitizer	0.001	0.0%	100.00%	544942	0.0
Mobile Mist Lube 27	0	0.0%	100.00%	544942	0.00
Dead Unit Compound	0	0.0%	100.00%	544942	0.00
Reprofix 800L Fixer Part A	0.047	0.0%	100.00%	544942	0.0
Repofix 800L Fixer, Part B Hardener	0.001	0.0%	100.00%	544942	0.00
Subtractive Developer SD 100	0.023	10.8%	100.00%	544942	0.68
Subtractive Finisher SF100	0	0.0%	100.00%	544942	0.00
AFGA G101P Developer Part A	0	0.0%	100.00%	544942	0.00
AFCA C101D Doveloper Dert D		0.00/	0.00%	F44042	0.0
AFGA G101P Developer Part B RE-Con Plate Cleaner	0	0.0% 90.0%	0.00% 100.00%	544942 544942	0.00

Total VOC Emissions =	10.70 Ton/yr
-----------------------	--------------

*VOC (Tons/Year) = Maximum Coverage pounds per MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year VOC = Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%. (Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

Appendix A: Emissions Calculations VOC From Printing Press Operations

Company Name: Elkhart Truth Publishing Company

Address City IN Zip: 421 South Second Street, Elkhart, IN 46516

CP: 039-11783 **PIt ID**: 039-00269

Reviewer: Nishat Hydari / EVP

THROUGHPUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin^2/YEAR
Harris N-1650	1600	54	544942

INK VOCS					
Ink Name Press Id	Maximum Coverage '(lbs/MMin^2)	Weight % Volatiles	Flash Off %	Throughput (MMin^2/Year)	Emissions* (TONS/YEAR)
1 1033 10	(153/141141111 2)			(IVIIVIIII Z/TCai)	(TONO/TEAR)
Black Ink, NHNP Low Rub (Oil)	0.854	12.8%	5.00%	544942	1.49
Color Ink (Soy) (Worse Case, Yellow)	0.18	7.5%	5.00%	544942	0.18
Blanket Wash Y-911	0.031	96.0%	100.00%	544942	0.1
Blanket Wash Y-995	0.003	30.0%	100.00%	544942	8.1 ² 0.25
Bleach Sanitizer	0.001	0.0%	100.00%	544942	0.0
Mobile Mist Lube 27	0	0.0%	100.00%	544942	0.00
Dead Unit Compound	0	0.0%	100.00%	544942	0.00
Reprofix 800L Fixer Part A	0.047	0.0%	100.00%	544942	0.0
Repofix 800L Fixer, Part B Hardener	0.001	0.0%	100.00%	544942	0.00
Subtractive Developer SD 100	0.023	10.8%	100.00%	544942	0.68
Subtractive Finisher SF100	0	0.0%	100.00%	544942	0.00
AFGA G101P Developer Part A	0	0.0%	100.00%	544942	0.00
AFCA C101D Doveloper Dert D		0.00/	0.00%	F44042	0.0
AFGA G101P Developer Part B RE-Con Plate Cleaner	0	0.0% 90.0%	0.00% 100.00%	544942 544942	0.00

Total VOC Emissions =	10.70 Ton/yr
-----------------------	--------------

*VOC (Tons/Year) = Maximum Coverage pounds per MMin^2 * Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) * Flash off * Throughput * 1 Ton per 2000 pounds

METHODOLOGY

Throughput = Maximum line speed feet per minute * Convert feet to inches * Maximum print width inches * 60 minutes per hour * 8760 hours per year = MMin^2 per Year VOC = Maximum Coverage pounds per MMin^2 * Weight percentage volatiles (water minus organics) * Flash off * Throughput * Tons per 2000 pounds = Tons per Year NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%. (Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

Appendix A: Emission Calculations HAP Emission Calculations

Company Name: Elkhart Truth Publishing Company

Address City IN Zip: 421 South Second Street, Elkhart, IN 46516

CP#: 039-11783 **Plt ID**: 039-00269

Permit Reviewer: Nishat Hydari / EVP

Material	Density (Lb/Gal)	Pounds of Material (lbs/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Cumene	Weight % Napthalene	Weight % Hydroquinone	Weight % Glycol Ether	Xylene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Napthalene Emissions (ton/yr)	Hydroquinone Emissions (ton/yr)	Glycol Ether Emissions (ton/yr)
Blanket Wash Y-911	7.01	0.031000	37.23	5.00%	4.00%	0.00%	0.00%	0.00%	0.25	0.20	0.00	0.00	0.00
Blanket Wash Y-995	6.34	0.003000	37.23	0.00%	0.00%	10.00%	0.00%	0.00%	0.00	0.00	0.05	0.00	0.00
AFGA G101P Developer Part B	1	0.000000	37.23	0.00%	0.00%	0.00%	5.00%	0.00%	0.00	0.00	0.00	0.00	0.00
RE-Con Plate Cleaner	8.62	0.000000	37.23	0.00%	0.00%	0.00%	0.00%	5.00%	0.00	0.00	0.00	0.00	0.00

Total State Potential Emissions 0.25 0.20 0.05 0.00 0.00

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Company Name: Elkhart Truth Publishing Company

Address City IN Zip: 421 South Second Street, Elkhart IN 46516

CP: 039-11783 **PIt ID:** 039-00269

Reviewer: Nishat Hydari / EVP

Heat Input Capacity Potential Throughput

MMBtu/hr MMCF/yr

6.4 56.1

Facilities	MMBtu/hı				
Boiler (B1)	4.6				
Boilers (B2)	0.9				
Boiler (B3)	0.9				
Total	6.4				

Pollutant

	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.05	0.21	0.02	2.80	0.15	2.35

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

